

ABSTRACT

A communication apparatus having a speech encoder and speech decoder able to retrieve and store voice messages in memory is described. The messages are stored in the memory according to a more compressed message format than the 5 speech-encoding format of the speech encoder. The apparatus includes a frame interpolation block for decompressing stored messages and thereby creating a signal in the speech-encoding format. A frame-decimation block compresses a speech-encoded signal, thereby allowing a corresponding voice message to be stored in the memory in the message format. A statistical analysis is performed to determine 10 inter-frame redundancy of parameters of the encoded signal. A portion of those parameters having relatively high inter-frame redundancy are compressed using a lossless compression algorithm, while a portion of those parameters having relatively low inter-frame redundancy are compressed using a lossy compression algorithm. Other parameters are not compressed according to pre-determined criteria 15 irrespective of their inter-frame redundancy.